

Appln No. 09/627,573

Amdt date October 6, 2005

Reply to Office action of June 21, 2005

REMARKS/ARGUMENTS

Claims 1-29 and 31-32 are currently pending in this application. Claims 1-10, 17-18, 26, and 28 have been amended. Claim 30 has been canceled. Claims 31-32 have been added. The added claims find full support in the original specification, claims, and drawings. No new matter has been added. This amendment is being submitted with a Request for Continued Examination. Entry of the amendment, and reconsideration, reexamination, and an early indication of allowance of claims 1-29 and 31-32 are respectfully requested.

As an initial matter, Applicant notes that an Amendment After Final Action was transmitted via facsimile on June 21, 2005, within two months of the date of the Final Office action. The Advisory Action was mailed on August 10, 2005. Accordingly, the period of filing this RCE expired on the mailing date of the Advisory Action. Thus, only a one month extension fee is currently due.

In the Final Office action, the Examiner rejected claims 1-9 and 26 under 35 U.S.C. 101 because the claimed invention was directed to non-statutory subject matter. Claims 1-9 and 26, as amended, are now directed to a "signal embodied in a carrier wave for transporting an impairment compensation sequence." This is clearly a statutory article of manufacture claim. Accordingly, withdrawal of the rejection under 35 U.S.C. 101 is respectfully requested.

Claims 10-16 and 18-25, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al. (U.S. Patent No. 6,721,279). Claim 17 is rejected under 35 U.S.C. 103(a) as

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being unpatentable over Zhang et al. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang in view of Langberg et al. (U.S. Patent No. 5,852,630). Applicant respectfully traverses these rejections.

Independent claims 1, 10, 17, and 28 have been amended to recite a "sequence organized to place a positive and a negative instance of each symbol from a predetermined set of symbols in each phase . . ." (Emphasis added). Independent claim 18 has been amended to recite a "sequence organized to place a positive and a negative instance of each symbol from a predetermined set of symbols in each of the N phases." (Emphasis added). Zhang fails to teach or suggest this limitation.

The Examiner relies on the disclosure on column 6, lines 29-65, column 9, lines 5-48, and column 10, lines 29-67, to contend that Zhang teaches placing training symbols (B_i^1) in each of the phases of a training sequence. (Advisory Action, page 2). However, nothing in these passages nor anywhere in Zhang is there a teaching or suggestion of placing both "a positive and a negative instance of each symbol" in each of the phases. Accordingly, claims 1, 10, 17, and 28 are now in condition for allowance.

Claims 2-9, 11-16, 19-27, and 29 are also in condition for allowance because they depend on an allowable base claim, and for the additional limitations that they contain.

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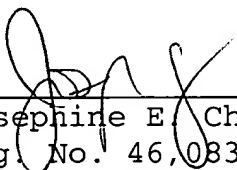
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In view of the above amendments and remarks, reconsideration, reexamination, and an early indication of allowance of pending claims 1-29 and 31-32 are respectfully requested.

Respectfully submitted,

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